

**ABSTRACT**

The present invention is based on the discovery that overexpression of  $\Delta$ FosB leads to bone formation and that  $\Delta$ FosB expression inhibits adipogenesis. The present invention provides methods of identifying agents that modulate bone formation and adipogenesis. Moreover, the present invention provides methods for identifying genes that are modulated by  $\Delta$ FosB and that modulates  $\Delta$ FosB, osteogenesis, and adipogenesis.